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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,725	11/13/2003	Jeng-Shyong Wu	71206	2171

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EXAMINER

REHM, ADAM C

ART UNIT PAPER NUMBER

2875

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/712,725

**Applicant(s)**

WU, JENG-SHYONG

**Examiner**

Adam C. Rehm

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/13/2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Claim 1 discloses a lamp cap used with a protective device. Claim 19 discloses a plurality of LED chips installed on a base. These features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 3A, 3B, 30, 32, 54, 87A, 93, 301 and 310.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "51" has been used to designate both an enveloping plate and a lock.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1/18 recite the limitation "the/said electrical connecting portion" in Line 10/11. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 8 recites the limitation "said predetermined angle" in Line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claims 15-17 and 29 commonly recite the limitation "said plurality of enveloping plates." There is insufficient antecedent basis for this limitation in the claims.
7. Claim 18 recites the limitation "the LED chip base" in Line 3 and "the insulating end" in Line 8. There is insufficient antecedent basis for these limitations in the claim.
8. Claim 23 recites the limitation "said insulator" in Line 1 and "said lead frames" in Line 2. There is insufficient antecedent basis for these limitations in the claim.
9. Claim 31 recites the limitation "the chip base" in Line 22. There is insufficient antecedent basis for this limitation in the claim.

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10. Claim 41 recites the limitation "said insulator" in Line 10, "electrical portion" in Line 12 and "insulating part" in Line 13. There is insufficient antecedent basis for these limitations in the claim.

11. Regarding Claim 35, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

12. Regarding Claim 40, the limitation "function controller" is indefinite in its meaning and purpose.

13. Claim 44 recites the limitation "said method" in Line 1. There is insufficient antecedent basis for this limitation in the claim.

14. Claims 2-17, 19-30, 32-40, 42, 43, 45 and 46 are indefinite for depending on indefinite claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-8, 10-22, 24-38 and 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332) in view of BRUNNER ET AL. (US RE37,554).

16. Regarding Claim 1, 18, 31, 41 and 44 HUANG provides a plurality of insulating lead wires consist of conductors in the center (21, Fig. 7), the conductor on one end of

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said lead wire is connected to said emerged lead frame, and said insulator of said insulating lead wire is bent to the back and extended sideward (Fig. 7 shows the insulator bent to the back and extended sideways); a protective device for holding said LED light bulb (1), the electrical connecting portion and a bent insulator positioning portion to make said insulator not easily be released (upon installation of the components depicted in Fig. 7, the bent configuration portion of the insulated wire 21 would prevent release of the un-insulated part of the wire 21). HUANG does not provide an LED light source. However, BRUNNER provides an LED light bulb (1) consisting of an LED chip (2), bonded wires (9), both connected to a plurality of lead frames (7/8) and enveloped by a lamp cap (Fig. 1), and one end of the lead frames emerges from the lamp cap (Fig. 1) for the purpose of obtaining the known advantages inherent with LEDs. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lamp unit of HUANG to include the type of LED bulb as taught by BRUNNER into HUANG in order to obtain known LED advantages, e.g. increased energy efficiency and longer lifespan. While neither HUANG nor BRUNNER explicitly provide a source of power, it is inherent that both require a power source to operate.

17. Regarding Claims 2-4 and 32, the BRUNNER LED has a lamp cap (1) with a flange (15) and made of transparent or colored plastic (Column 5, Lines 17 and 22).

18. Regarding Claim 5, the BRUNNER LED provides an insulating positioning bracket (14) installed on said plurality of lead frames so as to firmly fix said lead frames (Fig. 1).

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19. Regarding Claims 6-8 and 20-22, the HUANG lead wires are connected to the light source in a parallel configuration (Fig. 1 shows wires 21 entering the body of the light source 2 in a parallel configuration and at a predetermined angle of 180 degrees or straight line).

20. Regarding Claims 10-17, 24-30, 42, 43, 45 and 46, HUANG provides a transparent, plastic protective device (Column 2, Lines 58-60) or plurality of hollow plates (Fig. 7) that are configured in various predetermined shapes (Column 2, Lines 33-34); having openings (13) for installing wires (Fig. 8); and a border (18/19, Fig. 9) for joining the plates and holding or enveloping the light source (Fig. 8) and locking the bent part of the wires so as not to be easily released (Fig. 8).

21. Regarding Claim 19, while BRUNNER discloses the invention as cited above, BRUNNER does not teach a plurality of chips. However, it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

22. Regarding Claim 33-38, the HUANG device can be connected in strings, net or network arrangements (Column 1, Line 34 and Figs. 11 and 12) or a two-plate shape (Fig. 8).

23. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332) in further view of BRUNNER ET AL. (US RE37,554) as applied to Claim 31 and in further view of BRUCE ET AL. (US 5,957,564).

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24. HUANG discloses the invention as cited above along with the teachings of BRUNNER, but do not disclose a power supply device connected by a plug and a socket or a functional controller. However, BRUCE ET AL. (US 5,957,564) teaches a lighting display having a lighting function controller (111, Column 4, Lines 48-54) and electric wiring and a plug for providing electric power to the display (Column 7, Lines 58-59). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lamp unit of HUANG to include the type of lighting function controller, wiring and plug as taught be BRUCE ET AL. in order to provide connectable electric power to the display.

25. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over HUANG (US 6,299,332) in further view of BRUNNER ET AL. (US RE37,554) as applied to Claims 1 and 18 and in further view of WILSON (US 2,077,973).

26. HUANG discloses the invention as cited above along with the teachings of BRUNNER, but do not explicitly disclose a conductor and lead frames that are electrically connected by welding or pressure bonding. However, WILSON teaches soldering conductor wires to a light source (Column 3, Lines 26-27, Fig. 2) to provide an electric connection. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the lamp unit of HUANG to include the type of attached electrical components via welding or the like as taught by WILSON in order to achieve the known advantages of such, e.g. to provide a secure electric connection:



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***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

27. EFFER (US 3,820,237) discloses a light emitting packaging for an array of LEDs.

28. SAVVAGE, Jr. (US 5,116,229) discloses a lighting assembly with light unit terminals maintained in bent condition.

29. CHESELSKE (US 5,121,311) discloses a LED holder that maintains lead receptacles in bent condition.

30. CRUM ET AL. (US 6,074,244) discloses a stringer of decorative lights with an insulated wire connected with a light source in a parallel configuration.

31. TSENG (US 6,200,003) discloses a decorative light with electrical wires aligned with a light source in a parallel configuration.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR  
6/30/2005



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PRIMARY EXAMINER